Serial No.: 10/628,994 Inventors: Graettinger et al.

## Request for Withdrawal of the Final Status of the September 30, 2005 Office Action as Being Premature and for Reconsideration of the Application

It is submitted that the final status of the office action of September 30, 2005 is premature. The Examiner has clearly misapprehended the disclosure of the cited and applied art (Zheng, Pub. No. 2003/0166318) and, as a result of these misrepresentations, has failed to give due consideration to applicants' arguments set forth in the previous response to the rejections under 35 USC §102(e).

For example, in the applicants' July 19, 2005 response at page 6, ¶1, it is argued that layer 20 is the lower electrode, not part of the upper electrode as stated by the Examiner in the first office action. As evidence of this, it was pointed out that Zheng at ¶12 line 9 expressly recites a "lower electrode layer 20." However, at page 14 of the final office action the Examiner states the argument is not persuasive because Zheng teaches, at ¶12 and with reference to FIG. 3, "...a capacitor top plate 20." Thus the Examiner on the one hand states the argument is not persuasive while on the other hand the reference itself expressly states and confirms what the applicants are arguing. It is submitted that this is an improper and convoluted application of the cited art under 35 USC §102(e), and would only be possible only using hindsight reasoning to recharacterize the description of Zheng based on applicants' own disclosure, which approach is impermissible.

Many other features of the claimed invention are neither taught nor suggested by the cited reference, as discussed in detail in the July 19, 2005 response. The Examiner has issued substantially the same office action for the final of 9/30/05 as was issued on 4/19/05 without addressing the applicant's arguments, except the one discussed in the previous paragraph. Therefore, it would appear proper to withdraw the final status of the office action to reconsider (i.e. to fully and properly consider) the applicants' response in light of the description of Zheng under 35 USC §102(e).

Serial No.: 10/628,994 Inventors: Graettinger et al.

While this proper consideration may also be accomplished through an appeal, it would appear that the rigors and delays of an appeal are not in the interest of expediting prosecution and conserving the Examiner's as well as applicants' time until after the application and the applicants' response to the initial office action are given full and fair consideration on the merits. Therefore, withdrawal of the final status of the office action is respectfully requested, and the final status of the office action of September 30, 2005 is respectfully traversed.

## Rejections under 35 USC §102(e) over Zheng

While the Examiner's arguments were fully discussed in the applicants' response of July 19, 2005, and reconsideration of the previous arguments is respectfully requested herein by reference to same, the charts below summarize some arguments for two selected independent claims, 1 and 20. As indicated by a cursory review of the claim charts below, and by a more careful review of the response of July 19, 2005, it is clear that Zheng does not describe many of the claimed elements required for a proper rejection under 35 USC §102(e) and, therefore, cannot anticipate the invention as claimed.

Applicants have elected to provide their arguments and remarks in the columnar form of the claim charts in an effort to assist the Examiner in recognizing the differences between the present invention as claimed and the Zheng reference in order to highlight the patentably significant differences between Zheng and numerous aspects of applicants' invention.

Serial No.: 10/628,994 Inventors: Graettinger et al.

Claim 1	Zheng	Office Action
forming a first	does not appear to	uses bottom plate blanket layer 20 to
conductive cross- sectional <i>spacer</i> on said first dielectric sidewall wherein said first conductive spacer forms	describe conductive spacer. forms a bottom electrode blanket layer 20 (not spacer) on the	teach recited top plate spacers
a portion of a <i>capacitor</i> top plate	sidewall (¶12, line 9)	
forming first capacitor cell dielectric layer on said first conductive spacer	forms dielectric 22 on blanket lower electrode	uses dielectric 22 formed on blanket lower plate to teach dielectric formed on first conductive [upper plate] spacer
forming a second conductive cross-sectional spacer on said first capacitor cell dielectric layer	does not appear to describe second conductive spacer on first capacitor cell dielectric layer	Examiner states at page 3, lines 5, 6 that second conductive spacer on first capacitor cell dielectric is taught, does not indicate what layer is used to describe this. no opportunity to reply
forming a first conductive layer on said second conductive spacer, wherein said second conductive spacer and said conductive layer each form a portion of a capacitor bottom plate	forms upper electrode layer 26 on reox layer 24, not on any conductive spacer	though Examiner does not indicate what layer is used to teach the "first conductive layer on said second conductive spacer" it appears that it must be layer 26. This is the capacitor upper electrode, not the bottom plate which is presently claimed (however, see also comments two rows below)
forming a second cell dielectric layer on said first conductive layer	forms dielectric 22 and reox 24 on dielectric 22	Examiner has used layer 22 to teach first cell dielectric layer. layer 24 is formed prior to forming layer 26, therefore not formed on layer 26
forming a second conductive layer on said second cell dielectric layer, wherein said second conductive layer forms a portion of said capacitor top plate	forms top plate 26	Examiner uses layer 26 as top plate, but also appears to use layer 26 to teach "first conductive layer" which is part of "bottom plate" (see two rows above). Thus uses a single layer to describe both capacitor bottom plate and capacitor top plate, based on hindsight reasoning
forming a conductive feature which electrically connects said first conductive spacer and said second conductive layer	no conductive feature is formed to connect layer 20 (which Examiner uses as first conductive top plate spacer) to layer 26 (which Examiner uses as top plate).	Examiner uses "unlabeled" structure as describing this, does not indicate what this is. Only two conductive plate layers appear to be 20 (lower electrode) and 26 (upper electrode). If present, this would short bottom plate to top plate according to Examiner's teachings. If upper spacer pair of Zheng FIG. 3 is conductive, it contacts bottom plate 20 and is therefore part of bottom plate.

Serial No.: 10/628,994 Inventors: Graettinger et al.

Claim 20	Zheng	Office Action
within the recess in the base supporting layer, forming first and second conductive spacers having a first cell dielectric interposed therebetween which electrically isolates the first and second conductive spacers from each other	describes forming a bottom electrode 20 within the recess 18 and a top electrode 26 within recess 18. cell dielectric 22 electrically isolates bottom electrode from top electrode	Examiner uses layer 20 by itself as the first and second conductive spacers having a first cell dielectric interposed therebetween which isolates the first and second conductive spacers from each other. Layer 20, however, is a single connected layer, therefore electrically shorted, and not electrically isolated from each other by layer 22. hindsight reasoning.
forming a first conductive layer electrically connected to the second conductive spacer within the recess	Zheng forms no first conductive layer electrically connected to the second conductive spacer (layer 20, by Examiner's teaching) within recess 18	at page 9 lines 6-8 states that Zheng teaches forming a first conductive layer electrically connected to the second conductive spacer within the recess (p.1 ¶12 and FIG. 1), however FIG. 1 shows does not appear to show conductive layer connected to layer 20. 14 forms part of the recess, and is not in the recess
forming a blanket second conductive layer over the first conductive layer and electrically separated from the first conductive layer by a second cell dielectric layer	Zheng forms dielectrics 22 and 24, then forms top electrode 26. dielectrics 22 and 24 separate bottom electrode 20 from top electrode 26	Examiner states this is taught. the only blanket conductive layer formed over layer 20 is layer 26, the top electrode
electrically connecting the first conductive spacer and the blanket second conductive layer to form a storage capacitor, where first conductive spacer and the blanket second conductive layer form a portion of a capacitor top plate and the second conductive spacer and the first conductive layer form a portion of a capacitor bottom plate	Zheng describes only conductive layer 20 (bottom electrode) and conductive layer 26 (top electrode)	Examiner states Zheng teaches electrically connecting the first conductive spacer (he uses layer 20 to teach this) and the blanket second conductive layer (he uses layer 26 to teach this). This would short Zheng's top and bottom electrodes together. Further, the Examiner uses layer 20 to teach both the first and second conductive spacers, which as claimed form part of the top plate and the bottom plate respectively. However, layer 20 is a single layer and cannot form both part of the top plate and the bottom plate.

Serial No.: 10/628,994 Inventors: Graettinger et al.

Substantially all of these arguments, as well as others, were made in the July 19, 2005 response. Thus it is apparent that the final status of the Examiner's office action of September 30, 2005 should be withdrawn and the application and applicants' arguments above and in the response of July 19, 2005 should be properly considered. Reconsideration and withdrawal of the rejections is respectfully requested.

## Conclusion

If there are matters which may be addressed through a telephone call, the Examiner is cordially invited to contact the undersigned.

Respectfully submitted,

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